The left periphery of participial relative clauses Anna Volkova National Research University Higher School of Economics

Background: It is generally assumed that the syntactic structure of participial relative clauses (participial RCs) is impoverished, "reduced" in comparison to that of regular RCs (Burzio 1981, Chomsky 1981, Hazout 2001, Siloni 1995, Stowell 1981, a. o.). Participial RCs are often analyzed as VP-like structures (for some, embedded under a nominalizing node, Doron & Reintges 2005, Hazout 2001, Siloni 1995, a. o., but see Kayne 1994 who argues that participial clauses have a C, but crucially not a T). The participial RCs typically (i) don't license usual CP-material (*wh*-phrases, complementizers); (ii) don't have an independent temporal reference; (iii) don't have subjects. In this talk I will argue against generalizations (ii) and (iii) on the basis of data from Meadow Mari (Uralic). I will first present the data and their analysis, and then discuss their consequences for the general theory of participial RCs.

Data: Meadow Mari employs four participial forms: an active participle derived with the suffix -*še*, which relativizes the subject; a participle derived with -me, which relativizes all the positions from direct object (DO) to possessor (GEN) on the Accessibility Hierarchy (AH): SU > DO > IO > OBL > GEN > OCOMP (Keenan & Comrie 1977); a future participle derived with -*šaš*, and a negative participle -*dame*: both relativize all the positions on the hierarchy from SU to GEN. I will focus on the -*me* and -*dame* participles (2): they both can have subjects in Nom and thus can project a Spec,VP and potentially a T layer.

The puzzle: The subject of the *-me* and *-dome* pRCs can be encoded with a possessive marker (only for personal pronouns), with Genitive (available for all argument types) or with Nominative (only the lower part of the animacy hierarchy (1)). In case of +human nouns, both Genitive and Nominative marking is possible (2).

(1) 1&2 person > other pronoun > proper name > human > non-human > inanimate

(2) Jəvan [buxgalter(-ən) {pu-əmo/pu-ədə-mo}] pašadar nergen šon-a.

Ivan bookkeeper(-GEN) give-NZR/give-NEG.CONV-NZR wages about think-PRS.3SG Ivan is thinking about the wages that the bookkeeper {gave / did not give} to him.

Analysis: All participles in Meadow Mari can be combined with time adverbs. The time adverb *tengeč'e* 'yesterday' can both precede and follow the Genitive subject (3), while it can only precede, but not follow the Nominative subject (4).

(3) Jəvan [(tengeč'e) buxgalter-ən (tengeč'e) pu-əmo] pašadar-ž-əm šotl-a.

Ivan (yesterday) bookkeeper-GEN (yesterday) give-NZR wages-P.3SG-ACC count-3SG *Ivan is counting the wages that the bookkeeper gave (to him) yesterday.*

(4) Jəvan [(teŋgeč'e) buxgalter (??teŋgeč'e) pu-əmo] pašadar-ž-əm šotl-a.

Ivan (yesterday) bookkeeper (yesterday) give-NZR wages-P.3SG-ACC count-3SG *Ivan is counting the wages that the bookkeeper gave (to him) yesterday.*

From that I conclude that Genitive subject is assigned Case within the embedded clause and that Nominative is assigned lower in the structure than Genitive. Further, I propose that Meadow Mari pRCs have a more complex syntactic structure than is generally assumed which involves a T-layer. One argument in favour of this is that the participle form *-dame* is historically derived from a negative converb *-de* and the participle form *-me* and serves as sentential negation form for *-še* and *-me* participles (see Zanuttini 1996 who argues that sentential negation is a head that selects the tense phrase as its complement).

I use reflexivization as a test for subject properties, as well as the structure of the left periphery. Meadow Mari employs two nominal reflexive strategies, one of which – a simpler reflexive *škenže* – is subject-oriented and must be bound within the first finite clause. It can be long-distance bound as an argument of an embedded infinitival clause (5), but, crucially

for our discussion, not as an argument of a participial RC (6). As (6) shows, only Genitivemarked subjects can bind the reflexive *škenže*, while the Nominative cannot.

(5) $\ddot{U}d ar_i rveze_j de\ddot{c}' [\emptyset_j ška-lan-\check{z}e_{i/j} p\"{o}rt-am ašt-aš] jod-an. girl boy from PRO self-DAT-P.3SG house-ACC make-INF ask-PRT$ *The girl asked the boy to build her / himself a house.*

(6) Jəvan_i [buxgalter*(-ən)_j ška-lan-že_{j/*i} pu-əmo] pašadar-ž-əm šotl-a.

Ivan bookkeeper-GEN self-DAT-P.3SG give-NZR wages-P.3SG-ACC count-PRS.3SG *Ivan is counting the wages that the bookkeeper gave to himself.*

Discussion: Meadow Mari *škenže* has the structure of a possessive NP: it consists of a nominal stem *šken-* and a possessive suffix, a bound morpheme agreeing in number and person with the antecedent. At the same time *škenže* cannot project a full PossP, cf. (7). Although *šken-* categorically behaves as a noun in a PossP, it lacks the interpretation of an independent argument.

(7) *Jəvan Maša-n (poro) šken-ž-əm jörat-a. (Volkova, in press) Ivan Masha-GEN kind self-P.3SG-ACC love-PRS.3SG

Int.: Ivan loves Masha's (kind) self.

Volkova (in press) argues that due to the relational nature and the lexical deficiency of the *šken-* part, the structure of the Meadow Mari reflexive *škenže* contains an open argument, which is valued by a SpecTP via an Agree operation. This happens as a result of chain formation between the SpecTP and *šken* through a sequence of feature-sharing dependencies (Reuland 2011), hence the subject orientation and the constraints on the binding domain. Namely, the long-distance binding of *škenže* in the infinitival clauses also results from chain formation between *šken* and a higher subject via the left periphery of the infinitival clause, where the interplay between C^{-Fin} (representing the feature -finite) and C^{-T} (representing -Tense) serves as a switch providing the optionality in interpretation of *škenže* as in (5). Building on this account, I draw two conclusions: (i) The contrast between the participial and the infinitival embedded clauses in Meadow Mari comes from the absence of C-layer in participial RCs (against Kayne 1994 and in line with Doron & Reintges 2005). (ii) Based on the ability of the Genitive subject to bind *škenže* I assume that Genitive serves as a structural case in pRCs in Meadow Mari. The non-finite T node assigns Genitive case to its SpecTP (see for a similar treatment of Finnish non-finite clauses Vainikka 2016). What appears to be Nominative is actually a default Case form of an NP inside a vP (see for a similar account Kornfilt 2003).

Conclusion: I argue on the basis of Meadow Mari data that the syntactic structure of participial RCs is more complex that usually assumed. As Meadow Mari pRCs can have subjects and allow sentential negation, it follows that they have a T-layer. Based on the evidence from time adverb placement and binding I conclude that non-finite T in Meadow Mari assigns structural Genitive case. The fact that participial RCs are non-transparent for anaphoric binding unlike infinitival clauses indicates that participials have an impoverished left periphery, most importantly missing a C layer (contra Kayne 1994). By taking into account differences in functional structure as realized in Meadow Mari we arrive at a more finely grained typology of participial RCs than previously assumed.

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